

[0039] I claim:

1. A ball game system, comprising:
 - a planar playing surface;
 - a hoop dimensioned to receive a ball and disposed at an elevated position proximate an end of the playing surface;
 - a ball feeder for delivering a ball to a point above the planar surface;
 - means for receiving a payment; and
 - means for controlling the delivery of the ball from the ball feeder in response to the payment received.
2. The ball game system of claim 1, wherein the payment is made by one of the following means: tokens, credits, cash, credit cards and arcade-type cards.
3. The ball game system of claim 1, wherein the payment entitles a player to a predetermined playing time.
4. The ball game system of claim 1, wherein the payment entitles a player to a predetermined number of balls delivered from the ball feeder.
5. The ball game system of claim 1, wherein the planar playing surface comprises a resilient surface adjacent one or more deformable elastic surfaces.
6. The ball game system of claim 5, further comprising padding disposed about the perimeter of each of the one or more deformable elastic surfaces.

7. The ball game system of claim 5, wherein the deformable elastic surfaces exhibit shapes selected from the group consisting of squares, rectangles, triangles, circles, ellipsoids, trapezoids, hexagons, and octagons.
8. The ball game system of claim 5, further comprising means for adjusting the elasticity of rebounds provided by the one or more deformable elastic surfaces.
9. The ball game system of claim 8, wherein the control means further controls the elasticity adjusting means in response to the payment.
10. The ball game system of claim 8, wherein:
 - the one or more of deformable elastic surfaces comprise trampolines, each including a flexible fabric to which is connected about the perimeter of the flexible fabric a plurality of springs providing elastic forces resisting deformation of the flexible fabric; and
 - the elasticity adjusting means comprises a plurality of hydraulic pistons controllably engaging the plurality of springs so as to reduce the resistive force provided by the plurality of springs.
11. The ball game system of claim 8, wherein the elasticity adjusting means further comprises:
 - one or more pressurizable chambers disposed below each of the deformable elastic surfaces;
 - pumping means for adjustably pressurizing the chambers to a pressure such that the deformation of the deformable elastic surfaces is resisted; and
 - pressure releasing means for adjustably returning the one or more chambers to atmospheric pressure.

12. The ball game system of claim 1, wherein the ball feeder allows selection of ball delivery speed.
13. The ball game system of claim 1, wherein the ball feeder allows selection of ball delivery along a trajectory above the playing surface.
14. The ball game system of claim 1, further comprising a ball collector for conveying balls passing through the hoop to the ball feeder.
15. The ball game system of claim 14, wherein the ball collector comprises netting disposed circumferentially below the hoop and forming a channel of sufficient diameter to accommodate the balls passing through the hoop.
16. The ball game system of claim 1,
further comprising a plurality of sensors outputting to the control means position and trajectory information related to one or more moving players and ball above the planar surface; and
wherein the control means creates an output indicative of the movement of the one or more players and ball.
17. The ball game system of claim 16, wherein one or more of the plurality of sensors outputs player differentiation information.
18. The ball game system of claim 16, wherein the position and trajectory information includes a vertical height measured from the planar surface to a player jumping from the planar surface.

19. The ball game system of claim 16, wherein the ball feeder includes a ball counter outputting to the control means the number of balls delivered.
20. The ball game system of claim 16, further comprising a scoring sensor outputting an indicator to the control means that a ball has passed through the hoop.
21. The ball game system of claim 16, wherein the sensors output information related to blocked attempts to place the ball through the hoop.
22. The ball game system of claim 16, wherein the control means output represents a comparison of the respective performance of one or more players on the planar playing surface to the respective performance of one or more different players, as indicated by the position and trajectory information measured by the plurality of sensors.
23. The ball game system of claim 16, wherein the output comprises a visual display of player metrics.
24. The ball game system of claim 23, wherein the metrics consist of one or more metrics selected from the group consisting of: height jumped, number of jumps, average jump height, hang time, number of successful slams, distance from hoop, hoop angle, score, percentage successful slams, percentage successful blocks, and average number of successful slams in per time unit.
25. The ball game system of claim 23, wherein the player metrics are presented in relation to a specified time period.

26. The ball game system of claim 23, wherein the player metrics are presented in relation to a particular deformable elastic surface elasticity.
27. The ball game system of claim 16, wherein the output comprises sounds responsive to the measured performance of the one or more players.
28. The ball game system of claim 27, wherein the sounds comprise simulated crowd noises.
29. The ball game system of claim 27, wherein the sounds comprise training instructions.
30. The ball game system of claim 1, further comprising a camera controlled by the control means for recording activity occurring on the playing surface.
31. The ball game system of claim 1, wherein the hoop position is adjustable.
32. The ball game system of claim 1, wherein the backboard position is adjustable.
33. A ball game system, comprising:
 - a planar playing surface including a resilient surface adjacent one or more deformable elastic surfaces;
 - a hoop dimensioned to receive a ball and disposed at an elevated position proximate an end of the playing surface;
 - means for receiving a payment; and
 - means for controlling the elasticity adjusting means in response to the payment received.

34. The ball game system of claim 33, wherein the payment is made by one of the following means: tokens, credits, cash, credit cards and arcade-type cards.
35. The ball game system of claim 33, wherein the payment entitles a player to a predetermined playing time.
36. The ball game system of claim 33, further comprising padding disposed about the perimeter of each of the one or more deformable elastic surfaces.
37. The ball game system of claim 33, wherein the deformable elastic surfaces have shapes selected from the group consisting of squares, rectangles, triangles, circles, ellipsoids, trapezoids, hexagons, and octagons.
38. The ball game system of claim 33, wherein:
 - the one or more of deformable elastic surfaces comprise trampolines, each including a flexible fabric to which is connected about the perimeter of the flexible fabric a plurality of springs providing elastic forces resisting deformation of the flexible fabric; and
 - the elasticity adjusting means comprises a plurality of hydraulic pistons controllably engaging the plurality of springs so as to oppose the resistive force provided by the plurality of springs.
39. The ball game system of claim 33, wherein the elasticity adjusting means further comprises:
 - one or more pressurizable chambers disposed below each of the deformable elastic surfaces;

pumping means for adjustably pressurizing the chambers to a pressure such that the deformation of the deformable elastic surfaces is resisted; and

pressure releasing means for adjustably returning the one or more chambers to atmospheric pressure.

40. The ball game system of claim 33, further comprising:
 - a ball feeder for delivering a ball to a point above the planar playing surface, the delivery controlled by the control means in response to the payment received; and
 - a ball collector for conveying balls passing through the hoop to the ball feeder.
41. The ball game system of claim 40, wherein the ball collector comprises netting disposed circumferentially below the hoop and forming a channel of sufficient diameter to accommodate the balls passing through the hoop.
42. The ball game system of claim 40, wherein the ball feeder allows selection of ball delivery speed.
43. The ball game system of claim 40, wherein the ball feeder allows selection of ball delivery along a trajectory above the playing surface.
44. The ball game system of claim 40, wherein the ball feeder includes a ball counter outputting to the control means the number of balls delivered.
45. The ball game system of claim 40, wherein the payment entitles a player to a predetermined number of balls delivered from the ball feeder.
46. The ball game system of claim 33,

further comprising a plurality of sensors outputting to the control means position and trajectory information related to one or more moving players and ball above the planar surface; and

wherein the control means creates an output responsive to the movement of the one or more players and ball.

47. The ball game system of claim 46, wherein one or more of the plurality of sensors outputs player differentiation information.
48. The ball game system of claim 46, wherein the position and trajectory information includes a vertical height measured from the planar surface to a player jumping from the planar surface.
49. The ball game system of claim 46, further comprising a scoring sensor outputting an indicator to the control means that a ball has passed through the hoop.
50. The ball game system of claim 46, wherein the sensors output information related to blocked attempts to place the ball through the hoop.
51. The ball game system of claim 46, wherein the output comprises a visual display of player metrics.
52. The ball game system of claim 51, wherein the metrics consist of one or more metrics selected from the group consisting of: height jumped, number of jumps, average jump height, hang time, number of successful slams, distance from hoop, hoop angle, score, percentage successful slams, percentage successful blocks, and average number of successful slams in per time unit.

53. The ball game system of claim 51, wherein the player metrics are presented in relation to a specified time period.
54. The ball game system of claim 51, wherein the player metrics are presented in relation to a particular deformable elastic surface elasticity.
55. The ball game system of claim 46, wherein the output comprises sounds responsive to the measured performance of the one or more players.
56. The ball game system of claim 53, wherein the sounds comprise simulated crowd noises.
57. The ball game system of claim 53, wherein the sounds comprise training instructions.
58. The ball game system of claim 46, wherein the control means output represents a comparison of the respective performance of one or more players on the planar surface to the respective performance of one or more different players, as indicated by the position and trajectory information measured by the plurality of sensors.
59. The ball game system of claim 33, further comprising a camera controlled by the control means for recording activity occurring on the playing surface.
60. The ball game system of claim 33, wherein the hoop position is adjustable.
61. The ball game system of claim 33, wherein the backboard position is adjustable.

62. A ball game system, comprising:
- a plurality of playing areas each defined by a respective planar playing surface, each playing area including
 - a hoop dimensioned to receive a ball disposed at an elevated position proximate an end of the respective planar playing surface, and
 - a plurality of sensors outputting position and trajectory information with respect to one or more players and balls above the respective planar surface;
 - means for receiving a payment; and
 - means for controlling the operation of the sensors and receiving the position and trajectory information with which the control means creates an output indicative of the motion of the one or more players and ball in response to the payment received.
63. The ball game system of claim 62, wherein:
- each of the respective planar surfaces are parts of a single large planar surface;
 - and
 - the playing areas are further defined by a means for sectioning the single larger planar surface.
64. The ball game system of claim 63, wherein the sectioning means is a vertical divider preventing the one or more players and ball from entering a different playing area.
65. The ball game system of claim 63, wherein the plurality of playing areas consist of two contiguous playing areas each having its respective hoop at an end opposite the sectioning means between the respective playing areas.

66. The ball game system of claim 62, wherein each of the planar surfaces is adjacent at least one other planar surface of the plurality.
67. The ball game system of claim 62, wherein the payment is made by one of the following means: tokens, credits, cash, credit cards and arcade-type cards.
68. The ball game system of claim 62, further comprising one or more ball feeders for delivering balls to points above the respective planar surfaces.
69. The ball game system of claim 68, wherein the control means controls the delivery of the balls from the one or more ball feeders in response to the payment received.
70. The ball game system of claim 68, wherein the payment entitles the one or more players to a predetermined number of balls delivered from the one or more ball feeders.
71. The ball game system of claim 68, wherein the payment entitles a player to a predetermined playing time.
72. The ball game system of claim 68, wherein the one or more ball feeders consists of a single ball feeder having a plurality of delivery means.
73. The ball game system of claim 68, wherein the one or more ball feeders allow selection of ball delivery speeds.
74. The ball game system of claim 68, wherein the one or more ball feeders allow selection of ball delivery trajectories above the respective planar surfaces.

75. The ball game system of claim 68, wherein each of the one or more ball feeders includes a ball counter outputting to the control means the number of balls delivered.
76. The ball game system of claim 68, wherein each playing area further includes a corresponding ball collector for conveying balls passing through the corresponding hoop to the one or more ball feeders.
77. The ball game system of claim 76, wherein the respective ball collector comprises netting disposed circumferentially below the hoop and forming a channel of sufficient diameter to accommodate the balls passing through the hoop.
78. The ball game system of claim 62, wherein each of the planar playing surfaces comprises a resilient surface adjacent one or more deformable elastic surfaces.
79. The ball game system of claim 78, further comprising padding disposed about the perimeter of each of the one or more deformable elastic surfaces.
80. The ball game system of claim 78, wherein the deformable elastic surfaces exhibit shapes selected from the group consisting of squares, rectangles, triangles, circles, ellipsoids, trapezoids, hexagons, and octagons.
81. The ball game system of claim 78, further comprising means for adjusting the elasticity of rebounds provided by the one or more deformable elastic surfaces.
82. The ball game system of claim 81, wherein the control means controls the elasticity adjusting means in response to the payment received.

83. The ball game system of claim 78, wherein:
- the one or more of deformable elastic surfaces comprise trampolines, each including a flexible fabric to which is connected about the perimeter of the flexible fabric a plurality of springs providing elastic forces resisting deformation of the flexible fabric;
 - and
 - the elasticity adjusting means comprises a plurality of hydraulic pistons controllably engaging the plurality of springs so as to reduce the resistive force provided by the plurality of springs.
84. The ball game system of claim 78, wherein the elasticity adjusting means further comprises:
- one or more pressurizable chambers disposed below each of the deformable elastic surfaces;
 - pumping means for adjustably pressurizing the chambers to a pressure such that the deformation of the deformable elastic surfaces is resisted; and
 - pressure releasing means for adjustably returning the one or more chambers to atmospheric pressure.
85. The ball game system of claim 62, wherein one or more of each plurality of sensors outputs player differentiation information.
86. The ball game system of claim 62, wherein the position and trajectory information includes a vertical height measured from the planar surface to a player jumping from the planar surface.

87. The ball game system of claim 62, wherein each playing area further comprising a scoring sensor outputting an indicator to the control means that a ball has passed through the respective hoops.
88. The ball game system of claim 62, wherein the sensors output information related to blocked attempts to place the balls through the respective hoops.
89. The ball game system of claim 62, wherein the control means output comprises a visual display of player metrics for each of one or more players above each of the respective planar playing surfaces.
90. The ball game system of claim 62, wherein the player metrics consist of one or more metrics selected from the group consisting of: vertical height jumped, number of jumps, average jump height, hang time, number of successful slams, distance from hoop, hoop angle, score, percentage successful slams, percentage successful blocks, and average number of successful slams in per time unit.
91. The ball game system of claim 89, wherein the player metrics are presented in relation to a specified time period.
92. The ball game system of claim 89, wherein the player metrics are presented in relation to a particular deformable elastic surface elasticity.
93. The ball game system of claim 89, wherein the control means output comprises sounds responsive to the performance of the one or more players, as indicated by the position and trajectory information measured by the plurality of sensors in each respective playing area.

94. The ball game system of claim 93, wherein the sounds comprise simulated crowd noises.
95. The ball game system of claim 93, wherein the sounds comprise training instructions.
96. The ball game system of claim 89, wherein the control means output represents a comparison of the respective performance of one or more players in one of the plurality of playing areas to the respective performance of one or more players in another one of the plurality of playing areas, as indicated by the position and trajectory information measured by the plurality of sensors in each respective playing area.
97. The ball game system of claim 62, wherein the hoop position is adjustable.
98. The ball game system of claim 62, wherein the backboard position is adjustable.
99. The ball game system of claim 62, further comprising a camera controlled by the control means for recording activity occurring on the playing surface.
100. A ball game system, comprising:
 - a plurality of playing areas each defined by a respective planar playing surface, each playing area including a hoop dimensioned to receive a ball disposed at an elevated position proximate an end of the respective planar playing surface;
 - one or more ball feeders for delivering balls to points above the respective planar playing areas;
 - means for receiving a payment; and

means for controlling the delivery of the balls from the one or more ball feeders in response to the payment received.

101. The ball game system of claim 100, wherein:
each of the respective planar surfaces are parts of a single large planar surface;
and
the playing areas are further defined by a means for sectioning the single larger planar surface.
102. The ball game system of claim 101, wherein the sectioning means is a vertical divider preventing the one or more players and ball from entering a different playing area.
103. The ball game system of claim 101, wherein the plurality of playing areas consist of two contiguous playing areas each having its respective hoop at an end opposite the sectioning means between the respective playing areas.
104. The ball game system of claim 100, wherein each of the planar surfaces is adjacent at least one other planar surface of the plurality.
105. The ball game system of claim 100, wherein the payment is made by one of the following means: tokens, credits, cash, credit cards and arcade-type cards.
106. The ball game system of claim 100, wherein the payment entitles one or more players to a predetermined playing time.
107. The ball game system of claim 100, wherein the payment entitles one or more player to a predetermined number of balls delivered from the ball feeder.

108. The ball game system of claim 100, wherein the planar playing surface comprises a resilient surface adjacent one or more deformable elastic surfaces.
109. The ball game system of claim 108, further comprising padding disposed about the perimeter of each of the one or more deformable elastic surfaces.
110. The ball game system of claim 108, wherein the deformable elastic surfaces exhibit shapes selected from the group consisting of squares, rectangles, triangles, circles, ellipsoids, trapezoids, hexagons, and octagons.
111. The ball game system of claim 108, further comprising means for adjusting the elasticity of rebounds provided by the one or more deformable elastic surfaces.
112. The ball game system of claim 111, wherein the control means controls the elasticity adjusting means in response to the payment.
113. The ball game system of claim 111, wherein:
- the one or more of deformable elastic surfaces comprise trampolines, each including a flexible fabric to which is connected about the perimeter of the flexible fabric a plurality of springs providing elastic forces resisting deformation of the flexible fabric; and
- the elasticity adjusting means comprises a plurality of hydraulic pistons controllably engaging the plurality of springs so as to reduce the resistive force provided by the plurality of springs.

114. The ball game system of claim 111, wherein the elasticity adjusting means further comprises:
- one or more pressurizable chambers disposed below each of the deformable elastic surfaces;
 - pumping means for adjustably pressurizing the chambers to a pressure such that the deformation of the deformable elastic surfaces is resisted; and
 - pressure releasing means for adjustably returning the one or more chambers to atmospheric pressure.
115. The ball game system of claim 100, wherein the one or more ball feeders allow selection of ball delivery speed.
116. The ball game system of claim 100, wherein the one or more ball feeders allow selection of ball delivery along a trajectory above the playing surface.
117. The ball game system of claim 100, further comprising a ball collector for conveying balls passing through the hoop to the ball feeder.
118. The ball game system of claim 117, wherein the ball collector comprises netting disposed circumferentially below the hoop and forming a channel of sufficient diameter to accommodate the balls passing through the hoop.
119. The ball game system of claim 100,
- further comprising a plurality of sensors outputting to the control means position and trajectory information related to one or more moving players and ball above each of the respective planar surfaces; and

wherein the control means creates an output indicative of the movement of the one or more players and ball.

120. The ball game system of claim 119, wherein one or more of the plurality of sensors outputs player differentiation information.
121. The ball game system of claim 119, wherein the position and trajectory information includes a vertical height measured from the planar surface to a player jumping from the planar surface.
122. The ball game system of claim 119, wherein the ball feeder includes a ball counter outputting to the control means the number of balls delivered.
123. The ball game system of claim 119, further comprising a scoring sensor outputting an indicator to the control means that a ball has passed through the hoop.
124. The ball game system of claim 119, wherein the sensors output information related to blocked attempts to place the ball through the hoop.
125. The ball game system of claim 119, wherein the output comprises a visual display of player metrics.
126. The ball game system of claim 125, wherein the metrics consist of one or more metrics selected from the group consisting of: height jumped, number of jumps, average jump height, hang time, number of successful slams, distance from hoop, hoop angle, score, percentage successful slams, percentage successful blocks, and average number of successful slams in per time unit.

127. The ball game system of claim 125, wherein the player metrics are presented in relation to a specified time period.
128. The ball game system of claim 125, wherein the player metrics are presented in relation to a particular deformable elastic surface elasticity.
129. The ball game system of claim 119, wherein the output comprises sounds responsive to the measured performance of the one or more players.
130. The ball game system of claim 129, wherein the sounds comprise simulated crowd noises.
131. The ball game system of claim 130, wherein the sounds comprise training instructions.
132. The ball game system of claim 129, wherein the control means output represents a comparison of the respective performance of one or more players in one of the plurality of playing areas to the respective performance of one or more players in another one of the plurality of playing areas, as indicated by the position and trajectory information measured by the plurality of sensors.
133. The ball game system of claim 100, further comprising a camera controlled by the control means for recording activity occurring on the playing surface.
134. The ball game system of claim 100, wherein the hoop position is adjustable.
135. The ball game system of claim 100, wherein the backboard position is adjustable.

136. The ball game system of claim 100, wherein the one or more ball feeders consists of a single ball feeder having a plurality of delivery means.
137. A ball game system, comprising:
a plurality of playing areas each defined by a respective planar playing surface including a resilient surface adjacent one or more deformable elastic surfaces, each playing area including
a hoop dimensioned to receive a ball disposed at an elevated position proximate an end of the respective planar playing surface, and
means for adjusting the elasticity of rebounds provided by the one or more deformable elastic surfaces;
means for receiving a payment; and
means for controlling the elasticity adjusting means in response to the payment received.
138. The ball game system of claim 137, wherein:
each of the respective planar surfaces is parts of a single large planar surface; and the playing areas are further defined by a means for sectioning the single larger planar surface.
139. The ball game system of claim 138, wherein the sectioning means is a vertical divider preventing the one or more players and ball from entering a different playing area.
140. The ball game system of claim 138, wherein the plurality of playing areas consist of two contiguous playing areas each having its respective hoop at an end opposite the sectioning means between the respective playing areas.

141. The ball game system of claim 137, wherein each of the planar surfaces is adjacent at least one other planar surface of the plurality.
142. The ball game system of claim 137, wherein the payment is made by one of the following means: tokens, credits, cash, credit cards and arcade-type cards.
143. The ball game system of claim 137, wherein the payment entitles a player to a predetermined playing time.
144. The ball game system of claim 137, further comprising padding disposed about the perimeter of each of the one or more deformable elastic surfaces.
145. The ball game system of claim 137, wherein the deformable elastic surfaces have shapes selected from the group consisting of squares, rectangles, triangles, circles, ellipsoids, trapezoids, hexagons, and octagons.
146. The ball game system of claim 137, wherein:
 - the one or more of deformable elastic surfaces comprise trampolines, each including a flexible fabric to which is connected about the perimeter of the flexible fabric a plurality of springs providing elastic forces resisting deformation of the flexible fabric; and
 - the elasticity adjusting means comprises a plurality of hydraulic pistons controllably engaging the plurality of springs so as to oppose the resistive force provided by the plurality of springs.

147. The ball game system of claim 137, wherein the elasticity adjusting means further comprises:
- one or more pressurizable chambers disposed below each of the deformable elastic surfaces;
 - pumping means for adjustably pressurizing the chambers to a pressure such that the deformation of the deformable elastic surfaces is resisted; and
 - pressure releasing means for adjustably returning the one or more chambers to atmospheric pressure.
148. The ball game system of claim 137, further comprising:
- a ball feeder for delivering a ball to a point above the planar playing surface, the delivery controlled by the control means in response to the payment received; and
 - a ball collector for conveying balls passing through the hoop to the ball feeder.
149. The ball game system of claim 148, wherein the ball collector comprises netting disposed circumferentially below the hoop and forming a channel of sufficient diameter to accommodate the balls passing through the hoop.
150. The ball game system of claim 148, wherein the payment entitles a player to a predetermined number of balls delivered from the ball feeder.
151. The ball game system of claim 148, wherein the ball feeder allows selection of ball delivery speed.
152. The ball game system of claim 148, wherein the ball feeder allows selection of ball delivery along a trajectory above the playing surface.

153. The ball game system of claim 148, wherein the ball feeder includes a ball counter outputting to the control means the number of balls delivered.
154. The ball game system of claim 137,
further comprising a plurality of sensors outputting to the control means position and trajectory information related to one or more moving players and ball above the planar surface; and
wherein the control means creates an output responsive to the movement of the one or more players and ball.
155. The ball game system of claim 154, wherein one or more of the plurality of sensors outputs player differentiation information.
156. The ball game system of claim 154, wherein the position and trajectory information includes a vertical height measured from the planar surface to a player jumping from the planar surface.
157. The ball game system of claim 154, further comprising a scoring sensor outputting an indicator to the control means that a ball has passed through the hoop.
158. The ball game system of claim 154, wherein the sensors output information related to blocked attempts to place the ball through the hoop.
159. The ball game system of claim 154, wherein the output comprises a visual display of player metrics.

160. The ball game system of claim 159, wherein the metrics consist of one or more metrics selected from the group consisting of: height jumped, number of jumps, average jump height, hang time, number of successful slams, distance from hoop, hoop angle, score, percentage successful slams, percentage successful blocks, and average number of successful slams in per time unit.
161. The ball game system of claim 159, wherein the player metrics are presented in relation to a specified time period.
162. The ball game system of claim 159, wherein the player metrics are presented in relation to a particular deformable elastic surface elasticity.
163. The ball game system of claim 159, wherein the output comprises sounds responsive to the measured performance of the one or more players.
164. The ball game system of claim 163, wherein the sounds comprise simulated crowd noises.
165. The ball game system of claim 163, wherein the sounds comprise training instructions.
166. The ball game system of claim 154, wherein the control means output represents a comparison of the respective performance of one or more players in one of the plurality of playing areas to the respective performance of one or more players in another one of the plurality of playing areas, as indicated by the position and trajectory information measured by the plurality of sensors.

167. The ball game system of claim 137, further comprising a camera controlled by the control means for recording activity occurring on the playing surface.
168. The ball game system of claim 137, wherein the hoop position is adjustable.
169. The ball game system of claim 137, wherein the backboard position is adjustable.
170. A ball capture and feed system, comprising:
 - means for receiving a payment;
 - means for delivering a ball to a position above a ball court only upon the receipt of a payment; and
 - a ball collector for conveying balls passing through a hoop to the ball feeder, the hoop positioned at an elevated position above the ball court and dimensioned to receive the ball.
171. The ball capture and feed system of claim 170, wherein the ball collector comprises netting disposed circumferentially below the hoop and forming a channel of sufficient diameter to accommodate the balls passing through the hoop.
172. The ball capture and feed system of claim 170, wherein the ball collector is composed of a segment of flexible polymeric material disposed circumferentially below the hoop and forming a channel of sufficient diameter to accommodate the balls passing through the hoop.
173. A ball game system, comprising:
 - a planar playing surface;

a hoop dimensioned to receive a ball and disposed at an elevated position proximate an end of the playing surface;
means for receiving a payment; and
means for controlling usage of the hoop and playing surface in response to the payment received.

174. The ball game system of claim 173, wherein the usage control means comprises a mechanism for adjusting the position of the hoop so as to remove it from play.
175. The ball game system of claim 173,
further comprising a backboard disposed at an elevated position proximate the hoop; and
wherein the usage control means comprises a mechanism for adjusting the position of the backboard so as to remove it from play.
176. A ball game system, comprising:
a plurality of playing areas each defined by a respective planar playing surface, each playing area including a hoop dimensioned to receive a ball and disposed at an elevated position proximate an end of the respective planar playing surface;
means for receiving a payment; and
means for controlling usage of the hoop and playing areas in response to the payment(s) received.
177. The ball game system of claim 176, wherein the usage control means comprises one or more mechanism(s) for adjusting the position of each hoop so as to remove it from play.

178. The ball game system of claim 176,
further comprising, in each playing area, a backboard disposed at an elevated position proximate the respective hoop; and
wherein the usage control means comprises one or more mechanism(s) for adjusting the position of each backboard so as to remove it from play.
179. A ball game system, comprising:
a planar playing surface;
a hoop dimensioned to receive a ball and disposed at an elevated position proximate an end of the playing surface; and
a plurality of sensors outputting position and trajectory information with respect to one or more players and balls above the planar surface;
means for receiving a payment; and
means for controlling the operation of the sensors and receiving the position and trajectory information with which the control means creates an output indicative of the motion of the one or more players and ball in response to the payment received.
180. The ball game system of claim 179, further comprising a second hoop dimensioned to receive the ball and disposed at an elevated position proximate an opposite end of the playing surface.
181. The ball game system of claim 179, wherein the payment is made by one of the following means: tokens, credits, cash, credit cards and arcade-type cards.
182. The ball game system of claim 179, further comprising a ball feeder for delivering balls to points above the planar playing surface.

183. The ball game system of claim 182, wherein the control means controls the delivery of the balls from the ball feeder in response to the payment received.
184. The ball game system of claim 182, wherein the payment entitles the one or more players to a predetermined number of balls delivered from the ball feeder.
185. The ball game system of claim 182, wherein the payment entitles a player to a predetermined playing time.
186. The ball game system of claim 182, wherein the ball feeder allows selection of ball delivery speeds.
187. The ball game system of claim 182, wherein the ball feeder allows selection of ball delivery trajectories above the planar playing surface.
188. The ball game system of claim 182, wherein the ball feeder includes a ball counter outputting to the control means the number of balls delivered.
189. The ball game system of claim 182, further comprising a ball collector for conveying balls passing through the hoop to the ball feeder.
190. The ball game system of claim 189, wherein the ball collector comprises netting disposed circumferentially below the hoop and forming a channel of sufficient diameter to accommodate balls passing through the hoop.
191. The ball game system of claim 179, wherein the planar playing surface comprises a resilient surface adjacent one or more deformable elastic surfaces.

192. The ball game system of claim 191, further comprising padding disposed about the perimeter of the one or more deformable elastic surfaces.
193. The ball game system of claim 191, wherein the deformable elastic surfaces exhibit shapes selected from the group consisting of squares, rectangles, triangles, circles, ellipsoids, trapezoids, hexagons, and octagons.
194. The ball game system of claim 191, further comprising means for adjusting the elasticity of rebounds provided by the one or more deformable elastic surfaces.
195. The ball game system of claim 194, wherein the control means controls the elasticity adjusting means in response to the payment received.
196. The ball game system of claim 191, wherein:
the one or more of deformable elastic surfaces comprise trampolines, each including a flexible fabric to which is connected about the perimeter of the flexible fabric a plurality of springs providing elastic forces resisting deformation of the flexible fabric;
and
the elasticity adjusting means comprises a plurality of hydraulic pistons controllably engaging the plurality of springs so as to reduce the resistive force provided by the plurality of springs.
197. The ball game system of claim 191, wherein the elasticity adjusting means further comprises:
one or more pressurizable chambers disposed below each of the deformable elastic surfaces;

pumping means for adjustably pressurizing the chambers to a pressure such that the deformation of the deformable elastic surfaces is resisted; and

pressure releasing means for adjustably returning the one or more chambers to atmospheric pressure.

198. The ball game system of claim 179, wherein one or more of each plurality of sensors outputs player differentiation information.
199. The ball game system of claim 179, wherein the position and trajectory information includes a vertical height measured from the planar surface to a player jumping from the planar surface.
200. The ball game system of claim 179, further comprising a scoring sensor outputting an indicator to the control means that a ball has passed through the hoop.
201. The ball game system of claim 179, wherein the sensors output information related to blocked attempts to place the balls through the hoop.
202. The ball game system of claim 179, wherein the control means output comprises a visual display of player metrics for each of one or more players above the planar playing surfaces.
203. The ball game system of claim 179, wherein the player metrics consist of one or more metrics selected from the group consisting of: vertical height jumped, number of jumps, average jump height, hang time, number of successful slams, distance from hoop, hoop angle, score, percentage successful slams, percentage successful blocks, and average number of successful slams in per time unit.

- 204. The ball game system of claim 203, wherein the player metrics are presented in relation to a specified time period.
- 205. The ball game system of claim 203, wherein the player metrics are presented in relation to a particular deformable elastic surface elasticity.
- 206. The ball game system of claim 203, wherein the control means output comprises sounds responsive to the performance of the one or more players, as indicated by the position and trajectory information measured by the plurality of sensors.
- 207. The ball game system of claim 206, wherein the sounds comprise simulated crowd noises.
- 208. The ball game system of claim 206, wherein the sounds comprise training instructions.
- 209. The ball game system of claim 179, wherein the control means output represents a comparison of the respective performance of a first group of one or more players to the respective performance of a second group of one or more players on the planar playing surface, as indicated by the position and trajectory information measured by the plurality of sensors in each respective playing area.
- 210. The ball game system of claim 179, wherein the hoop position is adjustable.
- 211. The ball game system of claim 179, further comprising a backboard at an elevated position proximate the hoop, the position of the backboard being adjustable.

212. The ball game system of claim 179, further comprising a camera controlled by the control means for recording activity occurring on the playing surface.